MANUFACTURING EXTENSION PARTNERSHIP Success Stories from the Field

Miniature Tool and Die Inc.

Massachusetts Manufacturing Extension Partnership

MTD Micro Molding Receives ISO9001: 2000 Certification

Client Profile:

Miniature Tool & Die, Inc. (MTD), a small veteran-owned company located in Charlton, Massachusetts, designs and manufactures the smallest molded components in the world. These components are used in the medical device, life science, industrial, electronics and telecommunications markets. MTD is experienced in molding "designer materials," such as resorbable polymers (PLA, PGA), shape memory polymers, PEEK, and LCP. In business for over 33 years, MTD is vertically integrated providing design, engineering, micro molding, and micro manufacturing services to clients while addressing their needs confidentially. MTD employs 12 people.

Situation:

The mid 1990's brought the mold making industry to a halt in the US. In 1997, more than 1,300 US mold making shops went out of business due to global competition. To remain competitive, MTD shifted their focus from a mold making manufacturer to a micro molding solutions provider. This shift was the key to replacing a shrinking market segment with one of innovation and growth. Medical OEM clients represented the largest portion of MTD's business. These clients were impressed with MTD's quality; however, over time they started demanding ISO certification for MTD to achieve approved vendor status. MTD identified several large lost contracts directly related to the lack of a formalized quality system. MTD engaged the Massachusetts Manufacturing Extension Partnership (Mass MEP), a NIST MEP network affiliate, throught the Mass MEP Innovation Program to conduct an enterprise-wide assessment of their business.

Solution:

Mass MEP identified an immediate need for MTD to focus on obtaining ISO certification. After the assessment, MTD received an Innovation Program award that provided funding for the ISO training and consultation. The MassMEP Innovation Program provides matching funds awards from a US Department of Labor High Skills Workforce Development grant in partnership with the Worcester Regional Employment Board. United Registrars, a global, licensed ISO consultation company highly respected with OEM medical companies worldwide, worked closely with MTD Quality Management Representative, Donna Bibber, and her staff to implement a system in six months time. MTD achieved ISO 9001:2000 certification with TUV America without a single nonconformance!

Results:

- * Achieved ISO Certification.
- * Projected increase of 50 percent in micro molding sales.
- * Increased customers in biomedical, MEMs, electronics, Microfluidics, and nanotechnology markets.



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- * Anticipated demand for MTD's expertise as new products are conceptualized that require micro/nano level miniaturization.
- * Anticipate MTD to double in size over the next two years, resulting in growth for a multitude of industries at all levels of their supply chain.

Testimonial:

"Working with the Massachusetts MEP Innovation Program was an integral component of our business strategy. Thank you for your assistance and technical expertise. We value the technology roadmap you helped us create that outlines the steps needed to progress from the present state to our desired future state. ISO Certification was absolutely necessary to continue growing MTD's micro molding business. The implications of ISO Certification are just starting to surface--the true ROI for MTD will occur over time."

Donna Bibber, VP of Sales and Marketing

